10/523,472
Updated Search
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(FILE 'HOME' ENTERED AT 13:48:12 ON 06 AUG 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 13:48:31 ON 06 AUG 2007

L1 47780 S (HEPATITIS B SURFACE)
L2 17 S L1 AND (ALUMINIUM HYDROXIDE)
L3 10 DUPLICATE REMOVE L2 (7 DUPLICATES REMOVED)

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ANSWER 5 OF 10 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
DUPLICATE 4
AN 1999:63533 BIOSIS
DN PREV199900063533
TI Evidence for the denaturation of recombinant hepatitis B surface antigen on aluminium hydroxide gel.
AU Tleugabulova, Dina [Reprint author]; Falcon, Viviana; Penton, Eduardo
CS Quality Control Dep., Natl. Cent. Bioprod., P.O. Box 6048, Havana 6, Cuba
SO Journal of Chromatography B, (Dec. 11, 1998) Vol. 720, No. 1-2, pp. 153-163. print.
CODEN: JCBADL. ISSN: 0378-4347.
DT Article
LA English
ED Entered STN: 16 Feb 1999
Last Updated on STN: 16 Feb 1999
AB Despite the complexity of the subject of protein-alum interactions, a valuable information can be obtained by analyzing the adsorbed and desorbed protein by common physico-chemical methods. In the present work, to approach the adsorption of hepatitis B surface antigen (HBsAg) on alum, the experimental data were supported by complementary analyses of the adsorbed protein by immunoelectron microscopy and the desorbed protein by denaturing size-exclusion chromatography and sodium dodecyl sulfate-polyacrylamide gel electrophoresis under reducing conditions. First, the depletion of HBsAg was investigated. The aspects assessed were the conditions, recovery and chromatographic performance of the desorbed protein. The results obtained strongly suggested the loss of particulate structure of HBsAg after adsorption on alum. This conclusion was further reinforced by direct immunoelectron microscopic visualization of HBsAg in the adsorbed state.
CC Pharmacology - Immunological processes and allergy 22018
Comparative biochemistry 10010
Biochemistry methods - Proteins, peptides and amino acids 10054
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Minerals 10069
Biophysics - Methods and techniques 10504
Biophysics - Molecular properties and macromolecules 10506
Pharmacology - Clinical pharmacology 22005
Virology - Animal host viruses 33506
Immunology - Bacterial, viral and fungal 34504
Medical and clinical microbiology - Virology 36006
IT Major Concepts
Biochemistry and Molecular Biophysics; Methods and Techniques; Pharmaceuticals (Pharmacology)
IT Chemicals & Biochemicals
alum; aluminum hydroxide gels; proteins: analysis; recombinant hepatitis B surface antigen: analysis, denaturation; vaccines: analysis
IT Methods & Equipment
immunoelectron microscopy: analytical method, electron microscopy: CB, scanning electron microscopy; size exclusion chromatography: analytical method, liquid chromatography; SDS-polyacrylamide gel electrophoresis: analytical method, electrophoretic techniques, purification method; SDS-PAGE system: Hoefer Scientific Instrument, equipment
IT Miscellaneous Descriptors
protein-alum interactions: analysis
ORGN Classifier
Hepadnaviridae 03301
Super Taxa
DNA and RNA Reverse Transcribing Viruses; Viruses; Microorganisms
Organism Name
hepatitis B virus
Taxa Notes

DNA and RNA Reverse Transcribing Viruses, Microorganisms, Viruses

RN 10043-01-3Q (alum)
10043-67-1Q (alum)
21645-51-2 (ALUMINUM HYDROXIDE)

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Taxa Notes

DNA and RNA Reverse Transcribing Viruses, Microorganisms, Viruses

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10043-67-1Q (alum)
21645-51-2 (ALUMINUM HYDROXIDE)

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AN 1999168176 EMBASE

TI Purification and characterization of hepatitis B virus surface antigen particles produced in Drosophila Schneider-2 cells.

AU Deml L.; Schirmbeck R.; Reimann J.; Wolf H.; Wagner R.

CS R. Wagner, Institute Medical Microbiology, Klinikum Regensburg, University of Regensburg, Franz-Josef-Strauss Allee 11, 95053 Regensburg, Germany. ralf.wagner@klinik.uni-regensburg.de

SO Journal of Virological Methods, (1999) Vol. 79, No. 2, pp. 205-217. .
Refs: 52
ISSN: 0166-0934 CODEN: JVMEDH

PUI S 0166-0934(99)00022-1

CY Netherlands

DT Journal; Article

FS 026 Immunology, Serology and Transplantation
037 Drug Literature Index
004 Microbiology

LA English

SL English

ED Entered STN: 27 May 1999
Last Updated on STN: 27 May 1999

AB The small surface antigen of hepatitis B virus (HBV) was produced in Drosophila melanogaster Schneider-2 (DS-2) cells transfected stably using an inducible Drosophila metallothionein promoter. Selected clonal DS-2 cell-lines expressed and secreted large quantities of HBsAg particles consisting exclusively of non-glycosylated 25 kDa proteins. HBsAg produced by DS-2 cells had physical and biochemical properties very similar to 22 nm particles derived from the human hepatoma cell-line PLC/PRF/5. DS-2 cell-derived HBsAg particles were purified near homogeneity by a strategy based on protein concentration, precipitation and ultracentrifugation. The resulting HBsAg product was <98% pure. A single immunisation of BALB/c mice with both DS-2 and yeast-cell derived purified HBsAg particles without adjuvants elicited a substantial humoral antibody and class-I restricted cytotoxic T lymphocyte (CTL) response. Adsorbtion of HBsAg particles to aluminium hydroxide resulted in increased levels of HBsAg-specific antibodies. However, CTLs were not elicited by HBsAg/Alum combinations. Thus, stably transfected DS-2 cells provide a useful source for the production of HBV subviral particles for diagnostic and research purposes as well as for novel vaccine development. Copyright (C) 1999 Elsevier Science B.V.

CT Medical Descriptors:
*hepatitis b virus
*antigen expression
*immunogenicity
gene expression regulation
drosophila melanogaster
ultracentrifugation
antibody response
gene expression system
immunization
hepatitis b: PC, prevention
immunoblotting
antigenicity
cytotoxic t lymphocyte
nonhuman
mouse
animal experiment
controlled study
animal cell
article
priority journal
Drug Descriptors:
*hepatitis b surface antigen

*hepatitis b vaccine: DV, drug development

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immunization
hepatitis b: PC, prevention
immunoblotting
antigenicity
cytotoxic t lymphocyte
nonhuman
mouse
animal experiment
controlled study
animal cell
article
priority journal
Drug Descriptors:
*hepatitis b surface antigen

*hepatitis b vaccine: DV, drug development